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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/872,931

06/01/2001

Christian Hentschel

PHNL 010327

3260

24737

7590

11/05/2003

PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
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EXAMINER

BUGG, GEORGE A

ART UNIT

PAPER NUMBER

2613

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/872,931

Applicant(s)

HENTSCHEL ET AL.

Examiner

George A Bugg

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— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 1-19, 25 and 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election without traverse of claims 20-24 in Paper No. 7 is acknowledged. It should also be noted that claims 25 and 26 were improperly grouped, and are drawn to a non-elected invention, and have therefore been withdrawn from consideration. This restriction is made final.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 20-24 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent Application Publication No. US 2002/0122601 A1 to Peng.

The applied reference has a common inventor, as well as a common assignee, with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C.

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102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

As for claim 20, Applicant claims a **scalable MPEG-2 compatible video decoder**. The title of the Peng reference discloses a scalable MPEG-2 decoder. Claim 20 further requires **a variable length decoder (VLD), an inverse quantizer (IQ) coupled to a VLD, an inverse discrete cosine transform (IDCT) coupled to an IQ, a motion compensator (MC) coupled to a VLD, a summing junction coupled to the IDCT and the MC, and a controller coupled to at least one of a VLD, IQ, IDCT, or MC**. Figure 2 of the Peng reference shows a VLD coupled to an IQ, which is turn coupled to an IDCT. In addition, Figure 2 shows an IDCT and MC coupled together by a summing junction, as well as the MC being coupled to the VLD. Element 26, of Figure 2, is a controller which is coupled to the VLD, IQ, IDCT, and the MC. Additionally, claim 20 requires that **the controller be responsive to operate in one of a plurality of modes each having a given complexity characteristic for an acceptable distortion level of an output of the decoder, and wherein the controller selects a mode based upon given complexity characteristics**. Sections 25-28 discloses that an IDCT algorithm that eliminates high frequency components may achieve both computational reduction, and acceptable picture quality. However, Peng further states that as additional computational savings is required, degradation of picture quality will increase. The solution is to prune, or not process data that has not been selected for

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processing. The amount of pruning needed is dependent upon the complexity of the IDCT algorithm. Peng states, in Section 28, that there is a complexity level associated with each IDCT algorithm, which also corresponds to a pruning pattern, and once the appropriate complexity level is determined an IDCT scaling algorithm is selected. A plurality of IDCT algorithm is equivalent to plurality of modes. Moreover, as stated, each algorithm is associated with its own complexity level, which in turn corresponds to a pruning pattern, which is used for computational reduction, while maintaining acceptable picture quality, or, as claimed, an acceptable distortion level. Furthermore, Peng states that once the appropriate complexity level is determined an IDCT scaling algorithm is selected. In other words, a mode is selected based on complexity.

As for claim 21, the mode is selected based on complexity level, as stated in Section 28. Complexity level is synonymous with available computing resources, as claimed. Furthermore, it is used to operate the IDCT.

As for claim 22, Figure 4 of the Peng reference shows multiple IDCT algorithms, which are selected in response to the controller 26.

As for claim 23, each algorithm can be a different mode, therefore, modes are determined by which IDCT algorithm is selected.

As for claim 24, selecting a mode of operation with the most efficient complexity to distortion characteristic is taught by the fact that Peng discloses that each algorithm is associated with its own complexity level, which in turn corresponds to a pruning pattern, which is used for computational reduction, while maintaining acceptable picture quality, or, as claimed, an acceptable distortion level.

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George A Bugg whose telephone number is (703) 305-2329. The examiner can normally be reached on Monday-Thursday 7:30 - 6:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4750.

George A Bugg  
Examiner  
Art Unit 2613

GAB

October 24, 2003

  
CHRIS KELLEY  
SUPERVISORY PATENT EXAMINER  
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